US ERA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JAN 25 1994

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT:

PP#8F3654. Propiconazole (Tilt®) in/on Peanuts. Amendment Dated 12/6/93. Request for Time-limited

Tolerances.

DP Barcode:

D197841. CBTS # 12997.

No MRID #.

FROM:

Michael T. Flood, Ph.D., Chemist

Tolerance Petition Section II

Chemistry Branch I -- Tolerance Support

Health Effects Division (7509C)

THROUGH:

Debra F. Edwards, Ph.D., Chief

Chemistry Branch I -- Tolerance Support

Health Effects Division (7509C)

TO:

S. Jackson/D. Greenway, PM 21 Fungicide/Herbicide Branch Registration Division (7505C)

and

Albin Kocialski

Chemical Coordination Branch Health Effects Division (7509C)

The petitioner, Ciba-Geigy Corporation, is proposing the following time-limited tolerances for the residues of the fungicide propiconazole (1-{[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl}-1H-1,2,4-triazole) and its metabolites determined as 2,4-dichlorobenzoic acid and expressed as parent compound equivalent:

Peanut Hay

20.0 ppm

Peanut Hulls

1.0 ppm

Peanuts

0.2 ppm

The proposed expiration date is 12/31/98.

Background

Our most recent review of PP#8F3654 was dated 11/8/93 (M. Flood). We concluded that

The storage stability study on peanuts is unacceptable and must be redone for nutmeat, hulls and hay. We are reluctant to translate preliminary data on grasses grown for seed to any other rac at this time. Recoveries from grass forage at 25-months were unacceptably high. [Conclusion #3]

Our conclusion was identical to that of the Phase 4 review of propiconazole, dated 6/30/92. We also noted (Conclusion #4) that the storage stability results for peanuts cast doubt on the validity of the residue analyses. Recoveries from peanut nutmeat samples increased by 249-333% over their initial value during the 25-month study.

Detailed Considerations

Ciba-Geigy argues that "establishment of time-limited tolerances to allow use of Tilt on peanuts during the generation of the storage stability data requested ... will serve the public interest and go a long way toward reaching the EPA goals of reducing agroecosystem exposure to plant protection products and increased implementation of IPM." The company has presented arguments to show that by replacing chlorothalonil, "a potential reduction in exposure to the agroecosystem of 17.13 million lbs. of plant medicine in the years 1994 to 2000 can be achieved with the registration of Tilt on peanuts."

Interim reports from the projected 3-year storage stability study would be submitted no later than 1/31/95 and 1/31/96, if the time-limited tolerances were approved by EPA.

Conclusion and Recommendation

Because storage stability recoveries in peanut racs were high, it follows that reported residue levels could also have been higher than actual residues at harvest, so the tolerances --especially the tolerance for nutmeat -- could be high. If the storage stability study in progress shows results similar to the first one, new residue data will be necessary. In the meantime, because the calculated risk would not increase if residue levels are indeed found to be lower than presently estimated, CBTS would have no objection to the proposed time-limited tolerance provided that BEAD agrees (at least qualitatively) that use of this fungicide on peanuts would reduce overall pesticide exposure and allow increased implementation of IPM.

cc: RF, Circu., PP#8F3654, List C Rereg. File, Mike Flood, E. Haeberer.

7509C:CBTS:Reviewer(MTF):CM#2:Rm804P:703-305-7990:typist(mtf):1/25/94.
RDI:SectionHead:ETHaeberer:1/24/94:BranchSeniorScientist:RALoranger:
1/24/94:BranchChief:DFEdwards:1/24/94.